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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,492	12/08/2000	Mo-Han Fong	NTL-3.2.170/3654(11852RMU	2393

35437 7590 01/25/2005

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EXAMINER

HARPER, KEVIN C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,492

Applicant(s)

FONG ET AL

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15, 20-26 and 28 is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-19 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 16-19 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Widegren et al. (US 6,374,112).

1. Regarding claim 1, Widegren discloses a method of providing wireless data communication at a control entity (fig. 7) comprising receiving data in accordance with an OSI reference level 3 protocol (col. 13, lines 30-33), selecting one of a centralized mode (ARQ is implemented twice in modules 210 and 214 for packet-oriented classes; col. 14, lines 20-26) and a distributed mode (ARQ is only implemented once in module 212 for packet-oriented classes), implementing when the centralized mode is selected all operations of OSI reference model layer 2 protocol (col. 13, lines 32-42) to deliver the data to at least one transceiver device (fig. 7, To Physical Layer WCDMA transceiver), and implementing when distributed mode is selected, only a portion of operations of the layer 2 protocol to deliver data to the transceiver device for transmission to a user (note: ARQ is not performed in module 212), where portions of operations of the later 2 protocol include those of a centralized protocol sub-layer (item 210).
2. Regarding claim 2, the receiving step includes receiving service data units (fig. 3, item 64 and fig. 7, item 244).

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3. Regarding claim 3, the type of mode selected depends on a data transmission rate and type of user application (col. 14, lines 20-26; note: quality of service includes allocated data rates for different types of real-time and non-real time data traffic -- col. 14, lines 47-51 and col. 15, lines 1-9; col. 11, lines 14-17).

4. Regarding claims 4-5, for either distributed mode or centralized mode, data is transmitted to multiple base stations in order to individually communicate respective data to multiple user devices (fig. 1; col. 5, lines 51-55) or concurrently transmit data to a user device (col. col. 2, lines 41-44; note: soft handoffs; col. 5, lines 56-58).

5. Regarding claim 6, the portions of the layer 2 protocol include those of at least a centralized or distributed radio link protocol sub-layer and a centralized or distributed medium access control sub-layer (col. 13, lines 32-35 and 47-52).

6. Regarding claim 7-8, the method further includes redelivering at least a portion of data to a transceiver device (fig. 7, items 230 and 244, ARQ), where the ARQ function includes sequencing information to facilitate retransmission of selected packets as noted by an ARQ state transmitted from a user device.

7. Regarding claim 16, 19 and 27, Widegren discloses an apparatus for providing wireless data communication (fig. 1, item 24) comprising a buffer configured to receive data in accordance with an OSI level 3 protocol (fig. 7, item 230; col. 14, lines 30-31), a switch configured to select one of a centralized mode and a distributed mode (item 230; col. 14, lines 20-26), an automatic repeat requestor (items 230 and 244) configured to implement all operations of an OSI reference model layer 2 protocol to deliver the data to at least one transceiver device (fig. 7, To Physical Layer WCDMA transceiver) and a multi-caster (item 26)

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configured to implement when a distributed mode is selected only a portion of layer 2 protocol to deliver data to at least one transceiver device (note: ARQ is only implemented once in module 212 for packet-oriented classes instead of twice when a scheduled transport of frames 214 is selected), where the portion of layer 2 protocol includes that of the centralized protocol sub-layer (item 210).

8. Regarding claims 17-18, data is transmitted to multiple base stations in order to individually communicate respective data to multiple user devices (fig. 1; col. 5, lines 51-55) or concurrently transmit data to a user device (col. col. 2, lines 41-44; note: soft handoffs; col. 5, lines 56-58).

Allowable Subject Matter

9. Claim 9-15, 20-26 and 28 are allowed.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chevillat et al. (US 6,181,683; fig. 2B and col. 4, lines 24-44) and Kumar et al. (US 6,434,367; fig. 2 and col. 8, line 64 through col. 9, line 11) each discloses distributed layer 2 functionality for a base station and another network device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only (applications must be associated with a customer number). For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

January 24, 2005

Seema S. Rao
SEEMA S. RAO 1/24/05
SUPERVISORY PATENT EXAMINER
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